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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,502	11/13/2003	Gordon Clark	2316.1811US01	1034
7590 Merchant & Gould P.C. P.O. Box 2903 Minneapolis, MN 55402-0903		01/25/2008	EXAMINER BUI, HUNG S	
			ART UNIT 2841	PAPER NUMBER
			MAIL DATE 01/25/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/714,502	Applicant(s) CLARK ET AL.	
	Examiner Hung S. Bui	Art Unit 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/29/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 6-7, 10-18 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Hope [US 4,486,816].

Regarding claim 1, Hope discloses a chassis (10, figure 1) comprising:

- four identical elongated members (20, 22, 26 and 28, figure 1) including two frontward elongated members (26, 28 and figures 1 and 10, column 2, line 40) and two rearward elongated members (20, 22, figure 10, column 2, line 41), each of the elongated member including:
 - o a first end and a second opposite end (see figure 1); and
 - o first and second retaining structures (60 and 68 or 98 and 102, figure 10, column 4, line 30);
- a first cover (199, figure 10) having edges inserted within the first retaining structure of one frontward elongated member (102, figure 10, column 4, line 39) and one rearward elongated member (76, figure 10);
- a second cover (197, figure 10) positioned opposite the first cover, the second cover having edges inserted within the first retaining structure of the other frontward elongated member and the other rearward elongated member;

- a backplane (32, figure 10, column 2, line 63) inserted within the second retaining structure (60, figure 10, column 3, line 9) of the rearward elongated members (see abstract); and
- end covers (44, 46, figure 1, column 2, lines 31-32) secured to the first and second ends of each of the elongated members; and
- a front opening (see figure 1) sized to receive modules.

Regarding claim 2, Hope discloses a back plane (32, figure 10) inserted within the second retaining structures of the rearward elongated members is generally perpendicular to the first and second covers (see figure 1).

Regarding claim 6, Hope, as modified, disclose wherein the first cover, second cover, the backplane and the end covers define an interior (a space disposed in the chassis as shown in figure 1), the interior including a number of compartments, each compartment being configured to receive one module (14-16, figure 1, column 2, line 55).

Regarding claim 7, Hope, as modified, disclose wherein each of the compartments includes at least one guide structure (34, 36, figure 10, column 2, lines 44-47) configured to receive one module.

Regarding claim 10, Hope, as modified, disclose wherein the end covers are secured to the elongated members by fasteners (172, 174, figure 1, column 7, line 1) that engage holes formed in the ends of the elongated members.

Regarding claim 11, Hope, as modified, disclose wherein the fasteners are self-tapping fasteners (self-tapping fastener is a well known for a normal fastener).

Regarding claim 12, Hope, as modified, disclose wherein the elongated members are extrusions that define the first and second retaining members (see figure 1).

Regarding claim 13, Hope, as modified, disclose wherein the elongated members have a uniform cross section (see figure 10).

Regarding claim 14, Hope, as modified, disclose wherein the first and second retaining structures are slots extending from the first end to the second end of each of the elongated members (figure 10).

Regarding claims 15 and 23, Hope, as modified, disclose wherein each of the elongated members further includes a hole (figure 1) extending from the first end to the second end, the hole being configured to receive fasteners for securing the end covers to each of the first and second ends of the elongated member.

Regarding claim 16, Hope, as modified, disclose wherein the second retaining structures are configured to retain modules within an interior of the chassis (see figure 1).

Regarding claim 17, Hope discloses a chassis (10, figure 1) comprising:

- a plurality of identical elongated members (20, 22, 26 and 28, figure 1), the plurality including a first pair of elongated members (26, 28 and figures 1 and 10, column 2, line 40) and a second pair of elongated members (20, 22, figure 10, column 2, line 41), each of the identical elongated members having first and second ends;

- a top plate (199, figure 10) captured by the first pair of elongated members and an opposite bottom plate (197, figure 10) captured by the second pair of elongated members;
- first and second opposite side plates (44, 46, figure 1, column 2, lines 31-32), the first side plate being fastened to the first ends of each of the elongated members, and the second side plate being fastened to the second ends of each of the elongated members;
- a backplane (32, figure 10, column 2, line 63) captured by one elongated member of the first pair of elongated members and another elongated member of the second pair of elongated members (see abstract); and
- a front opening (see figure 1) sized to receive modules (14-16, figure 1).

Regarding claim 18, Hope, as modified, disclose a printed circuit board defining a back plane, the printed circuit board being interconnected between one elongated member of the first pair of elongated members and another elongated member of the second pair of elongated members (see figures 1 and 10).

Regarding claim 21, Hope, as modified, disclose wherein the elongated members are formed of aluminum extrusions (figure 7, column 3, line 2).

Regarding claim 22, Hope, as modified, disclose wherein each of the elongated members includes a first slot and second slot, each of the slots extending from the first end to the second end of each of the elongated members, the top and bottom plates being captured within the first slots of the first and second pairs of elongated members (see figure 10).

Regarding claim 24, Hope, as modified, disclose wherein the second slot of at least one of the elongated members retains each module received in the front opening within an interior of the chassis (figures 1 and 10).

Regarding claim 25, Hope, as modified, disclose wherein the back plane is captured within the second slots of the one elongated member of the first pair of elongated members and the another elongated member of the second pair of elongated members (see figure 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hope in view of Chatel [US 5,506,751].

Regarding claims 3 and 19, Hope discloses the instant claimed invention except for the edge of each of the first and second covers include a flange portion.

Chatel discloses wherein the edges of each of the first and second covers include a flange portion, the flange portion being inserted within the first retaining structure of the respective two elongated members (44, figure 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the flange design of Chatel in Hope, for the purpose of facilitating the covers into the guides of the chassis.

Regarding claim 4, Hope discloses the instant claimed invention except for the end covers include mounting brackets for mounting the chassis to a rack.

Chatel discloses a chassis (figure 1) having two covers, wherein the end covers include mounting bracket (see figures 1 and 4) for mounting the chassis to a rack.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a bracket at an end of each covers of Hope, as suggested by Chatel, for the purpose of providing a support to mount the chassis on a rack.

Regarding claim 5, Hope discloses the instant claimed invention except for the covers include ventilation apertures.

Chatel discloses wherein the first and second covers include ventilation aperture (35, figures 4-5, column 6, line 3) for ventilating an interior region of the chassis.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have apertures on the covers of Hope, as suggested by Chatel, for the purpose of dissipating heat therefrom the chassis.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hope, as modified, as applied to claim 1 above, and further in view of Hill et al. [US 5,546,282].

Regarding claim 8, Hope, as modified, disclose the instant claimed invention except for a cable organizer positioned adjacent to the back of the chassis.

Hill et al. disclose a card cage (14, figure 1, column 2, line 50) having a cable organizer (26, figure 1, column 3, lines 43-49) positioned adjacent to the back of the cage.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the cable organizer in the back of the chassis of Hope, as modified, as suggested by Hill et al., for the purpose of providing arrangement of the chassis cables.

6. Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hope, as modified, as applied to claims 1 and 17 above, and further in view of Rebaudo et al. [US 4,470,100].

Regarding claims 9 and 20, Hope, as modified, disclose the instant claimed invention except for wherein the end covers/side plates include an end cover portion and extensions located along opposite edges of the end cover portion, the extensions including an extension edge arranged to position the elongated member in a position relative to the end cover portion.

Rebaudo et al. disclose a casing (10, figure 1) having at least two end covers/side plates (16, figure 1, column 2, line 53), wherein the end covers/side plates include an end cover portion and extensions located along opposite edges of the end cover/side plate portion, the extensions including an extension edge arranged to

position the elongated member in a position relative to the end cover/side plate portion (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the extension portion design of Rebaudo et al. with the end cover of Hope, as modified, for the purpose of providing rigidity of the sidewall to the chassis.

Response to Arguments

7. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Phillips [US 6,120,116] discloses circuit board storage cabinet; and
- Schnabel et al. [US 2004/0165366] disclose electronic assembly.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gutierrez F. Diego can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

01/15/2008
Hung Bui
Art Unit 2841


TUAN T. DINH
PRIMARY EXAMINER
1/16/08